Army Regulation 700–143
DLAD 4145.41
AFJI 24-201
NAVSUPINST 4030.55A
MCO P4030.40A

PACKAGING OF HAZARDOUS MATERIAL

Headquarters
Departments of the Army, Defense Logistics AgencyDepartment of the Air Force Department of the Navy Marine Corp Office
Washington, DC
23 July 96

Unclassified

SUMMARY of CHANGE

AR 700–143/DLAD 4145.41/AFJI 24–201/NAVSUPINST 4030.55A/MCO P4030.40A
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Effective 23 July 96

PACKAGING OF HAZARDOUS MATERIAL

By Order of the Secretary of the Army:

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General, United States Army
Chief of Staff

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OFFICIAL

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History. This publication has been reorganized to make it compatible with the Army electronic publishing database. No content has been changed.

Summary. This publication has been revised significantly and must be reviewed in its entirety.

Applicability. This directive is applicable to the Military Services and the Defense Logistics Agency, referred to as DoD components in this directive.

Proponent and exception authority. Not applicable.

Army management control process. Not applicable.

Supplementation. Not applicable.

Interim changes. Not applicable.

Suggested Improvements. Not applicable.

Distribution. Not applicable.

Contents (Listed by paragraph and page number)

Table List

*Supersedes reference 12 in enclosure 1 and replaces AFMCR 800–29/AMC–R 700–103/NAVSUPINST 4030.50/DLAR 4145.37/MCO 4030.39, Policies and Procedures for Hazardous Materials Package Certification.

Unclassified

RESERVED

A. REFERENCES.

See enclosure 1.

B. PURPOSE.

This directive:

1. Supersedes reference 12 in enclosure 1 and replaces AFMCR 800–29/AMC–R 700–103/NAVSUPINST 4030.50/DLAR 4145.37/ MCO 4030.39, Policies and Procedures for Hazardous Materials Package Certification.

2. Establishes uniform policy for the Military Services and the Defense Logistics Agency for packaging hazardous materials for safe, efficient, and legal storage, handling, and transportation, to include Performance Oriented Packaging (POP), Certification of Equivalency (COE), Department of Transportation (DOT) Exemption, and Competent Authority Approval (CAA).

C. APPLICABILITY AND SCOPE.

This directive is applicable to the Military Services and the Defense Logistics Agency, referred to as DoD components in this directive.

D. DEFINITIONS.

See enclosure 2. Refer to reference 6 in enclosure 1 for other terminology associated with hazardous material packaging.

E. POLICY:

1. General. All DoD–managed hazardous materials will be provided minimum required packaging protection at the lowest overall cost without compromising established DoD safety standards. Packagings shall provide adequate continuous protection to the packaged hazardous material and shall prevent any release of the hazardous material into the environment. When hazardous materials are shipped, packaging and marking shall conform to the applicable modal regulations. Modal regulations are found in the International Civil Aviation Organization (ICAO) Technical Instructions, the International Air Transport Association (IATA) Regulations, the International Maritime Dangerous Goods (IMDG) Code/International Maritime Organization (IMO), Title 49, Code of Federal Regulations (49 CFR) and AFJMAN 24–204 (formerly AFR 71–4)/TM 38–250/NAVSUP PUB 505/MCO P4030.19/DLAM 4145.3, Preparing Hazardous Materials for Military Air Shipment. POP requirements will be applied to hazardous materials packaging requirements for domestic shipments within the United States consistent with 49 CFR, Parts 100–199.

2. Procurement. DoD components will specify POP in procurement documents for all hazardous materials unless excepted under paragraph 11E of this section, or as directed by the DOD component Headquarters. POP will be specified for all direct vendor deliveries (DVDs).

3. Multi–Use POP. Containers designed for multiple inner components will be tested and certified to their maximum capacity. This testing will be sufficient for the containers when loaded to less than their maximum capacity. Any void space must be completely filled with cushioning material.

4. Marking. POP marking will be in accordance with the latest applicable revision of MIL–STD–129, MIL–STD–129–1, MIL–STD–129–2, or MIL–STD–129–3, and the applicable modal regulation(s).

(a) Those packagings that successfully pass DoD POP testing will be marked with the logo "USA/DOD." Activity–specific logos in Appendix A may be used by DoD test activities if directed by the owner of the code.

(b) DoD components are authorized to mark the applicable DoD POP logo on Federal or Military Specification containers that pass DoD POP testing. DoD–tested vendor packs may be marked by DoD personnel with the applicable DoD POP logo.

(c) DoD logos may be provided to vendors, at the discretion of the procuring activity, only if the containers are Government Furnished Equipment, or if the containers are strictly controlled by configuration control drawings, first article tests are performed, and inspection procedures are followed by Government quality assurance personnel that validate compliance.

5. Foreign POP. Foreign manufacturers exporting to the USA and utilizing packages certified to POP by a nation other than the USA may be accepted into the military transportation system when the package markings are in English.

6. POP Testing Requirements. POP testing will be in accordance with 49 CFR variation and instructions authorized by the Competent Authority, and any differences designated by ICAO, IATA, or the IMDG, as applicable. Use of ASTM D 4919, Specification for Testing of Hazardous Materials Packagings, is encouraged to ensure that tests can be repeated. Except for Class 1 material, POP testing will be conducted according to mode of transport, physical state of material, packing groups, weight, and container configuration rather than National Stock Numbers. Any other hazardous materials that are within the test parameters may be shipped in that certified container. Class 1 material shall be packed in POP packaging as specified by the managing activity.

(a) DoD components shall ensure that hazardous items are in POP containers, unless packaging is exempted under 11E of this directive. This may be accomplished by procuring the hazardous item(s) in POP certified containers, by performing in–house testing through use of a DoD test facility, or by use of a DOT–approved third–party POP test contractor. DoD components may require vendors to submit test reports and configuration control drawings when procuring hazardous materials in POP. Vendors may be asked to submit test reports by Data Item Description DI–PACK–81059 (Hazardous Materials Performance Oriented Packaging (POP) Test Report Format) or other applicable contractual packaging requirements. The decision to procure test data from a vendor is at the discretion of the contracting office. An example of when procurement of vendor test data may be appropriate is when the packaging data for the item is also being procured.

(b) POP testing shall include all tests required by 49 CFR or applicable Competent Authority decisions for the affected item's hazard class. DoD POP testing activities are exempt from the Lead Service assignments outlined in AR 700–15/NAVSUPINST 4030.28D/AFR 71–6/MCO 4030.33D/DLAR 4145.7, Packaging of Materiel. As a minimum, the following guidance applies to DoD component POP testing.

(1) Prior to initiating a request for POP testing, DoD components will research the DoD PC–POP program to determine if a tested package/ configuration already exists.

(2) DoD components shall identify related families of hazardous items and use a single test report to package and certify a related family to the maximum extent possible in accordance with the instructions published and authorized by the Competent Authority.

(3) In order to qualify for air shipment, inner receptacles of liquids must pass a hydraulic pressure test and all other applicable requirements of the ICAO Technical Instructions, IATA Dangerous Goods Regulations or AFJMAN 24–204 (formerly AFR 71–4), as applicable, or be packed within a supplementary packaging which meets the pressure requirements and all other applicable requirements. The outer pack or overpack will be marked 'AIR ELIGIBLE' in accordance with MIL–STD–129.

(4) POP tests will be conducted on affected hazardous materials packaging, regardless of tests that may be required by the Federal or military container specification. If the specification requires the same tests as those required for POP, the tests need not be duplicated if documented test results are available. POP tests will be conducted to the requirements of the most stringent mode of transportation anticipated.

(5) Where practicable, POP testing will be accomplished on inner packagings (unit containers) of combination packagings.

7. DoD Testing/Retesting. The following applies to POP testing/ retesting.

(a) The United States DOT is the United States Competent Authority and considers all of DoD as one entity (container manufacturer). Therefore, once a POP configuration has been tested by one DoD activity, other DoD shippers need not test the same package

configuration. For reparable hazardous items, the cognizant packaging design activity is responsible for the development of Special Packaging Instructions (SPI) or configuration control drawings and the required POP testing of the reusable packagings.

(b) Periodic retesting will be as required by 49 CFR or by the Competent Authority. Periodic retesting will be accomplished by the Military Service/Agency having item management responsibility for the hazardous item.

8. Drop Tests. The multiple container drop test requirements may be satisfied by using a single container dropped once for each orientation specified in 49 CFR. There is no need to use additional new containers to complete the required drop test, as long as the single container configuration passes all the drop tests of the series. However, if the container configuration fails one of the drop tests, a new container must be used to complete the drop tests.

9. Providing Test Reports to Vendors. DoD POP test reports will not be provided to vendors.

10. Reuse of Fast Packs. The reuse of tested fiberboard containers designed for reuse, PPP–B–1672, Box, Shipping, Reusable with Cushioning, is authorized contingent upon the requirements of 49 CFR, Paragraph 173.28. Reuse is authorized for domestic, international air, and military air. For international surface shipments, reusable fiberboard containers must be shipped inside intermodal transport containers.

11. Exceptions to POP Testing. Exceptions to the POP testing requirements are as follows:

(a) The following hazardous materials do not have to be shipped in a POP certified container provided the provisions of the modal regulations are met:

(1) Carbon Dioxide, Solid (Dry Ice).

(2) Magnetized material with a field strength of less than 0.00525 gauss at 4.527 meters (15 feet).

(3) Life Support Equipment.

(4) Class 2 Compressed Gas Cylinders.

(5) Class 7 Radioactive Material.

(6) Items with a capacity over 450L (119 gallons) as a receptacle for liquids or items weighing over 400 kg (882 pounds) and a capacity greater than 450L as a receptacle for solids.

(7) Limited quantities.

(8) Excepted quantities.

(b) Aerosols (Class 2 for domestic and air, Class 9 for international vessel) will be packed and marked according to modal regulations. Air shipments require only the outer shipping container to meet Packing Group II requirements.

(c) The following hazardous materials are exempted from POP based on international grandfathering and domestic transitional provisions:

(1) Government–owned hazardous materials packaged prior to 1 January 1990 are exempt from POP requirements for purposes of international vessel and military air transportation. This is commonly referred to as the POP grandfather clause. The shipping papers for these shipments shall be marked "Government owned goods packaged prior to 1 January 1990." This grandfather clause does not apply to commercial air transportation or domestic shipments.

(2) The 49 CFR, Part 171.14(c)(1) addresses the transitional provisions applicable to domestic shipments of packages filled prior to 1 October 1991 until 1 October 2001 providing the provisions of this Part are met.

(3) The 49 CFR, Part 173.62(e) grandfathers Class 1 (explosive) hazardous materials, owned by DoD, that were packaged prior to 1 January 1988 for domestic shipments only providing the provisions of this Part are met.

(d) Any hazardous materials exempt from the POP test requirements as identified in 11a above must be shipped as specified in the applicable modal regulations. See Paragraph e below for use of CAAs, Paragraph f below for use of COEs, Paragraph g below for use of limited or excepted quantity packagings, and Paragraph h below for use of DOT Exemptions.

(e) Unlike some previous requirements for hazardous materials packages, DoD activities may not waive POP requirements. Only the DOT Competent Authority can grant permission to use a design–type package without POP testing it. This procedure is accomplished through a CAA. Hazard classes covered by the performance standards, but exceeding the requirements for POP testing, must be shipped internationally using a CAA. See Appendix E for the information required to request a CAA.

(1) A CAA is a written approval granted by the DOT and is similar to a DOT Exemption. CAAs are required for international shipments of certain items, and must be attached to shipping papers. There are two types of CAAs, and they are issued by different offices within DOT. One type of CAA is issued for the hazard classification of explosive/munitions items. The other type of CAA is issued for the packaging. Only the packaging CAA may be used to certify an item for shipment. CAAs should be obtained by the Military Service/Agency who manages the item. The shipping activity that requires a packaging CAA must forward the CAA request containing the information outlined in Appendix E to their Military Service/Agency focal point (see Appendix F). A copy of the CAA must accompany each shipment.

(2) Once a CAA is issued for a specific item(s) for international shipments, that CAA will also be used for domestic shipments. If the item(s) is also covered by a COE, the COE will be canceled and the CAA will be used.

(f) The following information applies to COEs.

(1) COEs may continue to be used for domestic shipments of hazardous materials. However, whenever possible, these items should be converted to a CAA and the COE cancelled. A copy of the COE must accompany the shipment.

(2) A COE is issued by the responsible Military Command/Agency. It is an approval that the proposed packaging for shipment of hazardous materials either equals or exceeds the requirements of 49 CFR, Parts 100–180. A request for a COE must include a Hazardous Materials Data Package, and that request must be forwarded to the responsible Military Command/Agency. Information required in a Hazardous Materials Data Package is in Appendix B. Elements required in a COE are identified in Appendix C.

Examples of data item descriptions used to gather information for the Hazardous Materials Data Package are in Appendix D. When a reviewing activity approves a COE application, a Certification Control Number (CCN) will be issued to identify the COE using the following prefixes:

DLA – DL
Army – AY
Air Force – AF
Navy – NA
Marine Corps – MC

Combine these prefixes with the current calendar year to form the CCN; for example, DL–95–XXX. Mark the CCN on shipping papers, transportation control and movement documents (TCMD), and exterior containers in the same way as required by DOT regulations for DOT Exemption (special permit) numbers. The only exception to this marking requirement is the packaging of conventional ammunition (except the packaging for missiles and rocket motors, which have the CCN clearly marked on the exterior containers). Conventional ammunition packaging may be marked with the packaging drawing number in place of the CCN. Shipments of these packagings must have both the packaging drawing lumber and the CCN on the documents and TCMDs according to DOD 4500.32–R, Volume 1, MILSTAMP.

(g) Packagings used to ship hazardous materials classified as either limited or excepted quantity must be capable of passing the performance tests peculiar to these classifications specified in the modal regulation(s) being used to prepare the shipment.

(h) Shipments packaged in accordance with a DOT Exemption must meet all requirements of the exemption and applicable requirements of 49 CFR. DOT Exemptions for packaging and marking will be used for domestic shipments only.

12. Opening Vendor Packs. DoD components may open, inspect and subsequently reship vendor POP certified packages without retesting only when the container is resealed in an equivalent or

stronger manner than the original vendor method and the configuration of the contained hazardous items remains unchanged.

13. Noncompliant POP

(a) *New Procurement.* When DoD components determine that a vendor's certified POP pack does not comply with contractual POP requirements, suspend the receipt in materiel condition code "L." Follow the procedures in DLAD 4140.55/AR 735–11–2/SECNAVINST 4355.18/AFI 400–55, Reporting of Item and Packaging Discrepancies, and promptly notify the applicable procuring activity. The procuring activity will coordinate a review of the discrepancy report and provide written disposition instructions to the activity holding the discrepant material.

(b) *Station Returns and Receipts From Other DoD Activities.* When DoD components determine that another DoD Activity's certified POP pack does not comply with POP requirements, suspend the receipt in materiel condition code "J" or "K." Follow the procedures in DLAD 4140.55/AR 735–11–2/SECNAVINST 4355.18/AFI 400–55, Reporting of Item and Packaging Discrepancies, and promptly notify the applicable managing activity. The managing activity will coordinate a review of the discrepancy report and provide written disposition instructions to the activity holding the discrepant material.

F. RESPONSIBILITIES

1. The Office of the Deputy Under Secretary of Defense, Logistics, ODUSD(L), will act as the Program Manager for DoD Hazardous Materials POP.

2. The Commanders or Directors of DoD Components will:

(a) Comply with the policies, objectives, and guidelines in this directive.

(b) Designate individual focal points to coordinate with the DLA Hazardous Materials Central Management Office to:

(1) Coordinate purchase requests for United Nations (UN) testing that is performed by a DOT–approved third party test facility.

(2) Coordinate POP container testing to avoid redundant testing and to maintain DoD component serialization of test reports.

(c) Ensure that copies of all POP test reports are forwarded to the DLA Hazardous Materials Central Management Office as outlined in paragraph F3b.

(d) Develop internal operating procedures to handle organizational needs concerning POP.

3. The Defense Logistics Agency (MMDO) will:

(a) Publish and keep this directive current.

(b) Manage and maintain the DoD POP Data System, including pertinent information related to POP testing. Activities will ensure that copies of all test reports, whether developed in–house or on behalf of the DoD by a DOT–approved third party test facility, are forwarded to the DLA Hazardous Materials Central Management Office located at:

DLA Operations Support Office
ATTN: DOSO–DH
8000 Jefferson Davis Highway
Richmond, VA 23297–5083

(c) Provide, through DOSO–DH, DLA POP training to Military Services and DLA activities if requested. Military Services' training will involve a cost to the requesting activity for travel and per diem for the DLA instructors.

G. EFFECTIVE DATE AND IMPLEMENTATION.

For the Military Services, this publication is effective and shall be implemented immediately.

For DLA activities, this publication is effective and shall be implemented immediately.

H. INFORMATION REQUIREMENTS.

None.

Appendix

Section I
ENCL 1
References

1. DLAD 4140.55/AR 735–11–2/SECNAVINST 4355.18/AFR 400–54, Reporting of Item and Packaging Discrepancies.
2. MIL–STD–129, Marking for Shipment and Storage.
3. MIL–STD–129–1, Marking for Shipment and Storage – Ammunition and Explosives.
4. MIL–STD–129–2, Marking for Shipment and Storage – Medical Materiel.
5. MIL–STD–129–3, Marking for Shipment and Storage – Semiperishable and Perishable Subsistence.
6. Title 49, Code of Federal Regulations, Parts 100–199, Transportation.
7. ASTM D 4919, Specification for Testing of Hazardous Material Packagings.
8. International Civil Aviation Organization (ICAO) Technical Instructions.
9. International Maritime Dangerous Goods (IMDG) Code.
10. International Air Transport Association (IATA) Regulations.
11. AFJMAN 24–204 (formerly AFR 71–4)/TM 38–250/NAVSUP PUB 505/MCO P4030.19/DLAM 4145.3, Preparing Hazardous Materials for Military Air Shipment.
12. DLAR 4145.41/AR 700–143/AFR 71–5/NAVSUPINST 4030.55/MCO 4030.40, Performance Oriented Packaging of Hazardous Material.
13. AR 700–15/NAVSUPINST 4030.28D/AFR 71–6/MCO 4030.33D/DLAR 4145.7, Packaging of Materiel.
14. DOD 4500.32–R, Volume 1, MILSTAMP.

Section II
Encl 2
Terms and Definitions

1. CERTIFICATION–
the act of confirming that a completed package, marking inclusive, meets the requirements of UN Performance Oriented Packaging.

2. CERTIFIER–
one who physically recognizes the correctness of a package construction or has access to test data for that package and who then verifies in writing that it will perform to the level required. A certifier may perform one or more of the following acts of certification:

a. performs a packaging operation in compliance with instructions prepared by a package designer.

b. determines that the packaging and/or container has been manufactured, assembled, and marked in accordance with requirements.

3. CLOSURES–
devices which close an opening in a receptacle.

4. COMBINATION PACKAGINGS –
a combination of packagings for transport purposes, consisting of one or more inner packagings secured in an outer packaging.

5. COMPETENT AUTHORITY–
a national agency responsible under its national law for the control or regulation of a particular aspect of the transportation of hazardous materials. The Associate Director, Office of Hazardous Materials Transportation, Research and Special Programs Administration, U.S. Department of Transportation, is the United States Competent Authority.

6. COMPOSITE PACKAGINGS–
packagings consisting of an outer packaging and an inner receptacle so constructed that the inner receptacle and the outer packaging form an integral packaging. Once assembled, it remains thereafter an integrated single unit; it is filled, stored, transported and emptied as such.

7. EXCEPTED QUANTITIES (49 CFR DEFINITION)–
excepted quantity, when specified in a section of 49 CFR for a particular material, is small amount of certain hazardous materials that are not subject to the other requirements of 49 CFR 173, when they meet the criteria of 49 CFR 173.4.

8. HAZARDOUS MATERIAL (DOT DEFINITION)–
a substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated.

9. INNER PACKAGINGS–
packagings for which an outer packaging is required for transport. Inner packagings which are placed in an outer packaging form a combination packaging.

10. INNER RECEPTACLES–
receptacles which require an outer packaging in order to perform their containment function. An inner receptacle and its outer packaging form a composite packaging. An example of an inner receptacle is a drum liner.

11. IN–HOUSE TESTING–
POP testing conducted at a DoD packaging test facility.

12. INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)–
group which sets the standards for international transport of dangerous goods by air.

13. INTERNATIONAL AIR TRANSPORTATION ASSOCIATION (IATA)–
Members or Associate Members of IATA or airlines which are party to the IATA Multilateral Interline Traffic Agreement.

14. INTERNATIONAL MARITIME ORGANIZATION (IMO)–
group which sets the standards for international transport of dangerous goods by vessel.

15. INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG) CODE–
regulatory document which implements the requirements of the IMO.

16. LIMITED QUANTITIES (49 CFR DEFINITION)–
Limited quantity, when specified as such in a section applicable to a particular material, means the maximum amount of a hazardous material for which there is a specific labeling and packaging exception. (Note that limited quantities vary with each modal regulation.)

17. MAXIMUM CAPACITY–
largest capacity inner volume of receptacles or packagings expressed in liters.

18. OUTER PACKAGING–
the outer protections of a composite or combination packaging together with any absorbent materials, cushioning and any other components necessary to contain and protect inner receptacles or inner packagings.

19. OVERPACK (DOT DEFINITION)–
the outermost enclosure used in transporting a hazardous material other than a freight container.

20. PACKAGES–
the complete product of the packing operation, consisting of the receptacle to perform its containment function.

21. PACKAGINGS (DOT DEFINITION)–
receptacles and any other components or materials necessary for the receptacle to perform its containment function, including any means of closing. Commonly known as "shipping container."

22. PERFORMANCE ORIENTED PACKAGING (POP)–
type of packaging based on the ability of packaging to perform to a specified level of integrity when subjected to performance tests.

23. POP MARKINGS–
United Nations marking sequence.

24. RECEPTACLES–
containment vessels for receiving and holding substances or articles, including any means of closing.

25. SELF–CERTIFIER–
organization or person who acts as a certifier in his own packaging regard, approved by the Competent Authority.

26. TRANSITIONAL PACKAGING–
packages recognized as permissible prior to an effective date of a requirement which may continue to be legally used until an established expiration date.

27. UN COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS–
panel responsible for the development of recommendations dealing with the multimodal transport of dangerous goods.

Appendix A
PERFORMANCE ORIENTED PACKAGING IDENTIFICATION CODES

Note: These codes are for the identification of the activities listed and are not to be applied to any packaging unless directed by the specific activity represented by the code.

Table A

Packaging Design Activity	Code
Defense Logistics Agency, Cameron Station, VA	USA/DOD/DLA
Defense Construction Supply Center, Columbus, OH (CAGE 16236)	USA/DOD/DLC
Defense Electronics Supply Center, Dayton, OH (CAGE 14933)	USA/DOD/DLE
Defense Fuel Supply Center, Cameron Station, VA (CAGE 52838)	USA/DOD/DLF
Defense General Supply Center, Richmond, VA (CAGE 13873)	USA/DOD/DLG
Defense Industrial Supply Center, Philadelphia, PA (CAGE 14153)	USA/DOD/DLI
Army Armament, Munitions, and Chemical Command (AMCCOM), Rock Island, IL (CAGE 59678)	USA/DOD/AYA
Army Aviation and Troop Command (ATCOM), Ft. Belvoir, VA (CAGE 97403)	USA/DOD/AYB
Army Communications–Electronics Command (CECOM), Ft. Monmouth, NJ (CAGE 80063)	USA/DOD/AYC
ATCOM, St. Louis, MO (CAGE 19099) (RIC A12)	USA/DOD/AYG
Army Missile Command (MICOM), Huntsville, AL (CAGE 18876)	USA/DOD/AYM
ATCOM, Natick, MA (CAGE 81337)	USA/DOD/AYN
LOGSA Packaging, Storage and Containerization Center, Tobyhanna, PA (LOGSA PSCC)	USA/DOD/AYP
Army Medical Materiel Agency, Frederick, MD (CAGE 66732)	USA/DOD/AYS
Army Tank–Automotive (TACOM), Detroit, MI (CAGE 19207)	USA/DOD/AYT
ATCOM St. Louis, MO (CAGE 56646) (RIC B17)	USA/DOD/AYV
Army Armament Research, Development, and Engineering Center (ARDEC) Picatinny Arsenal, NJ (CAGE 19200)	USA/DOD/AYD
Army Edgewood Research, Development, and Engineering Center (ERDEC) Aberdeen Proving Ground, MD (CAGE 81361)	USA/DOD/AYE
Army Defense Ammunition Center and School Savanna, IL (CAGE 28620)	USA/DOD/DEV
Army Foreign Systems Division Aberdeen, MD	USA/DOD/FAD
Munitions Systems Division, Eglin AFB, FL (CAGE 32231)	USA/DOD/AF18
Ballistic Systems Division, Norton AFB, CA (CAGE 58259)	USA/DOD/AF14
Rome Air Development Center, Griffiss AFB, NY (CAGE 07877)	USA/DOD/AF17
Space Systems Division, Los Angeles AFB, CA (CAGE 07868)	USA/DOD/AFl9
Ogden Air Logistics Center Hill AFB, UT (CAGE 98747)	USA/DOD/AF70
San Antonio Air Logistics Center Kelly AFB, TX (CAGE 98750)	USA/DOD/AF68
Oklahoma city Air Logistics Center Tinker AFB, OK (CAGE 98748)	USA/DOD/AF71
Sacramento Air Logistics Center McClellan AFB, CA (CAGE 98749)	USA/DOD/AF80
Warner Robins Air Logistics Center Robins AFB, GA (CAGE 98752)	USA/DOD/AF84
AF Packaging Evaluation Activity Wright–Patterson, AFB, OH (CAGE 0B275)	USA/DOD/AF69
Marine Corps, Washington, DC (CAGE 80372)	USA/DOD/MCH
Marine Corps Logistics Base, Albany, GA (CAGE 01365)	USA/DOD/MCA
Marine Corps Logistics Base, Barstow, CA (CAGE 01363)	USA/DOD/MCB
Marine Corps Research, Development and Acquisition Command, Quantico, VA (CAGE 5N998)	USA/DOD/MCQ
Naval Air Systems Command Washington, DC (CAGE 30003)	USA/DOD/NAA
Space and Naval Warfare Systems Command Washington, DC	USA/DOD/NAB
Naval Facilities Engineering Command Washington, DC (CAGE 80091)	USA/DOD/NAC
Naval Sea Systems Command Washington, DC (CAGE 53711)	USA/DOD/NAD
Navy Aviation Supply Office Philadelphia, PA (CAGE 80132)	USA/DOD/NAE
Navy Ships Parts Control Center Mechanicsburg, PA (CAGE 67991)	USA/DOD/NAF

Appendix B
HAZARDOUS MATERIALS DATA PACKAGE

Note: When the information requested does not apply, write N/A in the space.

1. Requester or Petitioner:
a. Name

b. Company or activity and location.
c. Business telephone number.
2. Proposed Dates of Initial Shipment.
3. Title 49 CFR Provisions:
a. Identify all regulatory provisions involved.
b. Justify request for a COE and specify why DoD and public interest will be served by granting a COE.
c. Identify why standard provisions of Title 49 CFR are not appropriate.
d. Identify how the proposed deviation would provide adequate and reasonable degree of safety.
4. Item Description:
a. Proper Shipping Name.
b. Chemical Name.
c. Common Name.
d. Hazard Classification.
e. Form (radioactive materials only).
f. Quantity.
g. Properties and characteristics.
h. Composition and percentage (by volume and weight) of each chemical, if a solution or mixture.
i. Igniter ground procedures.
j. Explosive charges.
k. Whether or not rocket motor is in a propulsive state.
5. Packaging Data:
a. How the item is packed (drawing showing item/packaging interface) showing any containers, associated fill and relief valves, suspension system, cushioning media, shock indicators, explosive charges, cutters, dimensions, materials, etc. Drawings must contain enough information to permit engineering comparison between proposed item and the specification requirements or to permit evaluation of the proposed container or shipping configuration.
b. Number of items per inner package/quantity per unit pack.
c. Number of inner packages per exterior pack or container.
d. DOT specification number for packing containers.
e. Type and size.
f. Marking and labeling.
g. Drawings showing items mounted in containers.
h. Container data that reflect relevant shipping or accident experience.
i. Center of gravity.
j. Packaging procedures.
k. Test results. State regulation specifying the tests required and procedures to conduct these tests.
l. Previous analogous certifications or approvals.
m. Appropriate data regarding DOT specification containers or modified containers used.
n. Calculations or, preferably, test results of bursting strength and shatter characteristics of pressure vessels.
o. Provisions for electrical grounding.
6. Transportation Description: If the item, as packaged, is a transportability problem item, data required by a transportability report will form a part of this report. Where data are not generated by a transportability report, the following minimal action is required:
a. Identify modes of transportation.
b. Provide Drawings, sketches, or schematics showing different configurations:
(1) Blocking and bracing.
(2) Tiedown or securing.
(3) Location of center of gravity.
(4) Consolidation on pallets or in exterior shipping containers.
c. Identify the most probable hazards involved with each handling operation, each mode, or each different type of carrier equipment. Show the need for:
(1) Briefing crews.
(2) Escorts (technical, security police, etc.).
(3) Personnel protective equipment.
(4) Protective environmental equipment/personnel.
(5) Alerting state, military, or government offices of incident or accident.
(6) Exclusive use of carrier equipment.
(7) Specialized materials, equipment, or procedures (nonsparking materials, explosive–proof motors, etc.).
d. State what specific action is planned to satisfy each requirement identified in paragraph 6c.
e. Provide reports of tests conducted to verify movement and handling safety.
f. State what deviations or modifications or Title 49 CFR requirements are needed.

Appendix C
CERTIFICATION OF EQUIVALENCY (COE)

1. The COE has the following items:
a. CCN.
b. Authority.
c. Issued by, with signature.
d. Basis for certification.
e. Packaging Description.
2. Recommended Items:
a. DOT hazard classification (Proper Shipping Name, Label, Marking).
b. DoD hazard classification (Security Classification Guide, Division, United Nations Identification Number).
c. Mode(s) of transportation authorized. d. Expiration date.
3. Requirements of this appendix are considered minimum essential information to substantiate issuing a COE. When any of the information changes or is revised, the COE must be amended at the time such information becomes available.

Appendix D
DATA ITEM DESCRIPTIONS

Examples of data item descriptions that may be used to acquire information for substantiating data required in the hazardous materials data package are:

Table ERR

DI–L–3311	Explosive Hazard Classification Data
DI–PACK–80880	Transportability Report
DI–L–1903	Part, Component or Subsystem Test Plan
DI–PACK–81059	Hazardous Material Performance Oriented Packaging (POP) Test Report Format

Appendix E
APPLICATION FOR COMPETENT AUTHORITY APPROVAL

Supportive information must be submitted with the CAA request for proper DOT review. Any request that does not contain all of the necessary information will be returned to the requester for resubmission. Each request will include a cover sheet, which states why the CAA is being requested and identifies the mode(s) of transportation

affected. The information required below must be included as attachments. NOTE: When the information requested does not apply, write N/A in the space.

1. Attachment 1 – Information to Support Competent Authority Approval:

a. Product Nomenclature, National Stock Number(s) and/or Part Number(s), and EX–number (if assigned).

b. Hazard Class/Division. For Class 1 material, include the Storage Compatibility Group.

c. UN Identification Number.

d. UN Proper Shipping Name (ICAO and IMDG).

e. Item Description and Drawing Number. Include the item net and gross weight. For Class 1 material, also include the net explosive weight.

f. Packaging Description and Instructions/Drawing Numbers. If a COE and/or DOT–E has been issued, include the number and description.

g. Difference between DOT and DOD containers.

h. Reports of Test(s) Conducted. List and provide a short description of the tests conducted on the container (i.e. MIL–STD–648, FED–STD–lOl1C, MIL–R–8583A, POP Tests, Transportation and Handling Vibration Test, etc.).

2. Attachment 2 – Actual item drawings.

3. Attachment 3 – Actual item test reports.

4. Attachment 4 – Actual container drawings.

5. Attachment 5 – Actual container test reports.

6. Attachment 6 – Certification of Equivalency (if applicable).

7. Attachment 7 – Hazard Classification (if applicable).

Appendix F
PROCEDURES FOR SUBMITTING REQUESTS FOR COMPETENT AUTHORITY APPROVAL

1. When a CAA is required, the managing activity for the affected item will prepare the request. For a hazard classification CAA, contact the respective Military Service identified below:

a. Air Force:
HQ Air Force Safety Agency
ATTN: SEWV
9700 Avenue G, Suite 264
Kirtland AFB, NM 87117–5670
DSN: 244–1398

b. Army:
U.S. Army Technical Center for Explosive Safety
ATTN: SMCAC–ES
Savanna, IL 61074–9639
DSN: 585–8758

c. Navy:
Naval Ordnance Station
ATTN: Code 0412
Indian Head, MD 20640–5000
DSN: 364–4484

d. HQ MTMC:
Military Traffic Management Command
ATTN: MTOP–OPS
5611 Columbia Pike
Falls Church, VA 22041–5050
DSN: 289–1951

2. For a packaging CAA, the preparing activity will send the request to their service focal point identified below. The service focal point will review the request for completeness and accuracy before forwarding it through MTMC to DOT. Any questions on requesting or obtaining a copy of an existing CAA shall be addressed to the respective service focal point.

a. Defense Logistics Agency:
Depot Operations Support Office
ATTN: DOSO–DH
8000 Jefferson Davis Highway
Richmond, VA 23297–5900
DSN: 695–5445

b. Air Force:
AFMC LSO/LOPP
5215 Thurlow Street
Wright–Patterson AFB, OH 45433–5540
DSN: 787–4503/3023

c. Army:
CHIEF
U. S. Army Logistics Support Activity
Packaging, Storage, and Containerization Center
ATTN: AMXLS–TP–T
11 Hap Arnold Road
Tobyhanna, PA 18466–5072
DSN: 795–7070

d. Navy/Marine Corps
Naval Packaging, Handling, and Storage Center
ATTN: Code 50222
Naval Weapons Station Earle
Colts Neck, NJ 07722–5000
DSN: 449–2821

3. DoD agencies listed in the Department of Defense Explosives Classification Procedures (TB 700–2/T.O. 11A–1–47/NAVORDINST 8020.3/ DLAI 8220.1) are authorized to assign Interim Hazard Classifications (IHC) to allow the transportation of Class 1 explosive materials that do not contain a final hazard classification, until that final classification is established. The DOT will not issue a packaging CAA through the process explained above without a final hazard classification. If a packaging CAA is required, the requester must prepare the package identified in para. 2 above. The request must include a copy of the IHC and supportive data used to determine that classification. The requester must validate the need for an IHC and indicate why the final hazard classification has not been established. Requests for a packaging CAA for these Class 1 items must be directed to the service focal points identified in para. 1 above. The focal points will work through HQ MTMC to the DoD Explosive Safety Board to obtain a CAA from DOT.

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